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### 3. 510(K) SUMMARY

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**MAY 28 2013**

1. Applicant/Sponsor: Corin USA  
5670 West Cypress Street  
Suite C  
Tampa, Florida 33607  
Establishment Registration No.: 1056629
2. Contact Persons: Diana L. Martone  
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Corin USA  
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[diana.martone@coringroup.com](mailto:diana.martone@coringroup.com)  
  
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Vice President of Clinical and Regulatory  
Corin USA  
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[kathy.trier@coringroup.com](mailto:kathy.trier@coringroup.com)
3. Proprietary Name: Corin Trinity Acetabular System with Extra Long Heads
4. Common Name: Hip Prosthesis
5. Classification Name: Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis (21CFR 888.3353)  
Product Codes: LZO, MEH
6. Legally Marketed Devices to which Substantial Equivalence is claimed:
- Corin Trinity Acetabular System (K093472)
  - Corin Trinity Acetabular System with HXLPE Liners (K110087)
  - Trinity Biolog delta Modular Heads (K103120)
7. Device Description:

The Trinity Acetabular System is a modular acetabular cup system consisting of a press fit, titanium alloy shell; acetabular liners in neutral offset, +4mm offset, +4mm oblique, neutral 4mm EPW; and ceramic and CoCrMo modular heads. The ceramic and CoCrMo modular heads are compatible with Corin titanium femoral stems.

The purpose of this submission is to add 32mm (+7mm offset), 36mm (+8mm offset), and 40mm (+8mm offset) CoCrMo and BIOLOX *delta*<sup>TM</sup> ceramic extra-long femoral heads to the Trinity Acetabular System.

The Trinity Acetabular System is intended for use in total hip arthroplasty in skeletally mature patients, to provide increased mobility and reduce pain by replacing the damaged hip joint articulation where there is evidence of sufficient sound bone

to seat and support the components.

8. Intended Use / Indications:

The indications for the Trinity Acetabular System as a total hip arthroplasty include:

- Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis
- Rheumatoid arthritis
- Correction of functional deformity
- Developmental dysplasia of the hip (DDH) or congenital dysplasia of the hip (CDH)

The Trinity Acetabular System is intended for cementless, single use only.

9. Summary of Technologies/Substantial Equivalence:

The additional components of the Trinity Acetabular System are identical to the predicate devices in terms of intended use and indications, and materials, and similar in sizes, designs and performance. Based on these characteristics, the additional components of the Trinity Acetabular System are believed to be substantially equivalent to the predicate devices.

10. Non-Clinical Testing:

Non-clinical testing conducted to demonstrate substantial equivalence includes: stem fatigue testing and neck fatigue testing with head offsets representing the worse-case scenario.

11. Clinical Testing:

Clinical testing was not necessary to determine substantial equivalence between the additional components of the Trinity Acetabular System and the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center - WO66-G609  
Silver Spring, MD 20993-0002

May 28, 2013

Corin USA  
% Ms. Diana Martone  
Regulatory Affairs Associate  
5670 West Cypress Street, Suite C  
Tampa, Florida 33607

Re: K130343

Trade/Device Name: Trinity Acetabular System

Regulation Number: 21 CFR 888.3353

Regulation Name: Hip joint metal/ceramic/polymer semi-constrained cemented or  
nonporous uncemented prosthesis

Regulatory Class: Class II

Product Code: LZO, MEH

Dated: February 7, 2013

Received: February 27, 2013

Dear Ms. Martone:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

For

**Erin D. Keith**

Mark N. Melkerson

Director

Division of Orthopedic Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

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## 2. INDICATIONS FOR USE

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510(k) Number (if known): K130343 (pg 1/1)

Device Name: Trinity Acetabular System

Indications for Use:

The indications for the Trinity Acetabular System as a total hip arthroplasty include:

- Non-inflammatory degenerative joint disease including osteoarthritis and avascular necrosis
- Rheumatoid arthritis
- Correction of functional deformity
- Developmental dysplasia of the hip (DDH) or congenital dysplasia of the hip (CDH)

The Trinity Acetabular System is intended for cementless, single use only.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

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Elizabeth L. Frank -S  
Division of Orthopedic Devices